

## Title (en)

TRYPTOPHAN-2,3-DIOXYGENASE (TDO) AND/OR INDOLAMINE-2,3-DIOXYGENASE (IDO) INHIBITORS AND THEIR USE

## Title (de)

TRYPTOPHAN-2,3-DIOXYGENASE (TDO)- UND/ODER INDOLAMIN-2,3-DIOXYGENASE (IDO)-HEMMER UND IHRE VERWENDUNG

## Title (fr)

INHIBITEURS DE LA TRYPTOPHANE-2,3-DIOXYGÉNASE (TDO) ET/OU DE L'INDOLAMINE-2,3-DIOXYGÉNASE ET LEUR UTILISATION

## Publication

**EP 3082802 B1 20200226 (EN)**

## Application

**EP 14821081 A 20141202**

## Priority

- GB 201321316 A 20131203
- GB 201411215 A 20140624
- EP 2014076311 W 20141202

## Abstract (en)

[origin: WO2015082499A2] Provided is a tryptophan-2,3-dioxygenase (TDO) and/or indoleamine-2,3-dioxygenase (IDO) inhibitor compound for use in medicine, which compound comprises the following formula: wherein X2, X4, X10, and X11 may be the same or different and each is independently selected from C and N; X1, X3, X5, X6, X7, X8, and X9 may be the same or different and each is independently selected from C, N and O; each bond having a dotted line may independently be a double bond or a single bond, provided that valencies at each atom are maintained; the dotted lines joining X4 with the carbon atoms either side of X2 are single bonds, and are only present when X2 is absent, X3 is absent and X4 is C, and when these bonds are present the ring carbons on each side of X2 are not directly bonded to each other; each R1 may be present or absent and may be the same or different and is selected from H and a substituted or unsubstituted organic group, provided that the number of R1 groups present is such that the valency of X1 is maintained; each R12, R13, R13', R14, R15 and R15 may be present or absent and may be the same or different and each is independently selected from H and a substituted or unsubstituted organic group, provided that the number of such R groups present is such that the valency of the ring carbon atoms is maintained; R16 may be present or absent and is selected from H and a substituted or unsubstituted organic group, provided that the number of R16 groups present is such that the valency of X2 is maintained; each R17 may be present or absent and may be the same or different and is independently selected from H and a substituted or unsubstituted organic group, provided that the number of R17 groups present is such that the valency of X3 is maintained; each R2, R3, R4, and R5 may be present or absent and may be the same or different and is selected from H and a substituted or unsubstituted organic group, provided that the number of such R groups present is such that the valencies of X6, X7, X8, and X9 are maintained; each R7, R8 and R9 may be present or absent and may be the same or different and is selected from H and a substituted or unsubstituted organic group, provided that the number of such R groups present is such that the valencies of X10, X11, and X5 are maintained; and R6 is selected from H and a substituted or unsubstituted organic group, preferably H and a substituted or unsubstituted C1-C6 alkyl group; and wherein any R group may form a ring with any other R group on an adjacent and/or proximal atom.

## IPC 8 full level

**A61K 31/404** (2006.01); **C07D 401/04** (2006.01)

## CPC (source: EP US)

**A61K 31/404** (2013.01 - EP US); **A61K 31/435** (2013.01 - EP US); **A61K 31/4439** (2013.01 - EP US); **A61K 31/444** (2013.01 - EP US); **A61K 31/454** (2013.01 - EP US); **A61K 31/4545** (2013.01 - EP US); **A61K 31/4725** (2013.01 - EP US); **A61K 31/496** (2013.01 - EP US); **A61K 31/497** (2013.01 - EP US); **A61K 31/498** (2013.01 - EP US); **A61K 31/4985** (2013.01 - EP US); **A61K 31/506** (2013.01 - EP US); **A61K 31/5377** (2013.01 - EP US); **A61K 31/55** (2013.01 - EP US); **A61K 31/551** (2013.01 - EP US); **A61K 45/06** (2013.01 - US); **C07D 209/20** (2013.01 - EP US); **C07D 209/34** (2013.01 - EP US); **C07D 209/40** (2013.01 - EP US); **C07D 401/04** (2013.01 - EP US); **C07D 401/06** (2013.01 - EP US); **C07D 401/12** (2013.01 - EP US); **C07D 401/14** (2013.01 - EP US); **C07D 403/04** (2013.01 - EP US); **C07D 403/06** (2013.01 - EP US); **C07D 403/12** (2013.01 - EP US); **C07D 405/12** (2013.01 - EP US); **C07D 405/14** (2013.01 - EP US); **C07D 409/14** (2013.01 - EP US); **C07D 413/12** (2013.01 - EP US); **C07D 413/14** (2013.01 - EP US); **C07D 471/04** (2013.01 - EP US); **C07D 471/10** (2013.01 - EP US); **C07D 487/04** (2013.01 - EP US); **C07D 513/04** (2013.01 - EP US)

## Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

## DOCDB simple family (publication)

**WO 2015082499 A2 20150611**; **WO 2015082499 A3 20150730**; EP 3082802 A2 20161026; EP 3082802 B1 20200226; US 2016367564 A1 20161222; US 9931347 B2 20180403

## DOCDB simple family (application)

**EP 2014076311 W 20141202**; EP 14821081 A 20141202; US 201415100494 A 20141202